

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2004-19862; Directorate Identifier 2004-NM-228-AD; Amendment 39-13907; AD 2004-25-19]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) series airplanes. This AD requires revising the airplane flight manual to provide the flightcrew with procedures and limitations for operating an airplane with out-of-tolerance angle of attack (AOA) transducers. This AD also requires repetitive linearity tests of the AOA transducers, and corrective action if necessary. This AD is prompted by a report of premature wear of the potentiometers in AOA transducers having a certain part number. We are issuing this AD to prevent a delay in the stall computer commands for stall warning, stick shaker, and stick pusher operation, due to premature wear of the potentiometers of the AOA transducers, which may cause the airplane to enter a stall condition, and result in loss of control of the airplane.

DATES: Effective January 4, 2005.

The incorporation by reference of certain publications listed in the AD is approved by the Director of the Federal Register as of January 4, 2005.

We must receive comments on this AD by February 18, 2005.

ADDRESSES: Use one of the following addresses to submit comments on this AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590.
- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada. You can examine this information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

You can examine the contents of this AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL-401, on the plaza level of the Nassif Building, Washington, DC. This docket number is FAA-2004-19862; the directorate identifier for this docket is 2004-NM-228-AD.

Docket Management System (DMS)

The FAA has implemented new procedures for maintaining AD dockets electronically. As of May 17, 2004, new AD actions are posted on DMS and assigned a docket number. We track each action and assign a corresponding directorate identifier. The DMS AD docket number is in the form "Docket No. FAA-2004-99999." The Transport Airplane Directorate identifier is in the form "Directorate Identifier 2004-NM-999-AD." Each DMS AD docket also lists the directorate identifier ("Old Docket Number") as a cross-reference for searching purposes.

Examining the Docket

You can examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the DMS receives them.

FOR FURTHER INFORMATION CONTACT: Technical information: Wing Chan, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York 11590; telephone (516) 228-7311; fax (516) 794-5531.

Plain language information: Marcia Walters, marcia.walters@faa.gov.

SUPPLEMENTARY INFORMATION: Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on certain Bombardier Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) series airplanes. TCCA advises that angle of attack (AOA) transducers having a certain part number may have potentiometers that wear prematurely. The problem is dormant and can only be identified on in-service airplanes by a linearity test of each AOA transducer. Prematurely worn potentiometers in the AOA transducers, if not corrected, could result in a delay in the stall computer commands for stall warning, stick shaker, and stick pusher operation, which may cause the airplane to enter a stall condition, and result in loss of control of the airplane.

Relevant Service Information

Bombardier has issued the following temporary revisions (TR) to the applicable Canadair Challenger airplane flight manual (AFM).

BOMBARDIER TEMPORARY REVISIONS

Model	Temporary revision	Product support publication	Dated
CL-600-1A11 (CL-600) series airplanes	600/20-2	600 (not stated in document)	October 15, 2004
	600-1/15-2	600-1 (not stated in document)	October 15, 2004
CL-600-2A12 (CL-601) series airplanes	601/12-2	601-1B-1	October 15, 2004
	601/13-2	601-1A-1	October 15, 2004
	601/17-2	601-1B	October 15, 2004
	601/25-2	601-1A-18 (not stated in document).	October 15, 2004
CL-600-2B16 (CL-601-3A and -3R) series airplanes.	601/22-2	601A-1-1	October 15, 2004
	601/23-2	601A-1	October 15, 2004
CL-600-2B16 (CL-604) series airplanes	604/9-6	604-1	October 15, 2004

Among other things, the TRs describe procedures for revising the Limitations, Performance, and Normal Procedures Sections of the applicable Canadair Challenger AFM, to provide the flightcrew with procedures and limitations for operating an airplane with any out-of-tolerance AOA transducer.

Bombardier has also issued the following alert service bulletins:

ALERT SERVICE BULLETINS

For model—	Bombardier alert service bulletin	Dated
CL-600-1A11 (CL-600) series airplanes	A600-0729	October 14, 2004
CL-600-2A12 (CL-601) series airplanes and CL-600-2B16 (CL-601-3A and -3R) series airplanes	A601-0571	October 14, 2004
CL-600-2B16 (CL-604) series airplanes	A604-27-026	October 14, 2004

The alert service bulletins describe procedures for doing repetitive linearity checks (tests) for each AOA transducer, and corrective action if necessary. The corrective action includes replacing any AOA transducer that does not meet the specified linearity requirements with a serviceable AOA transducer.

TCCA mandated the temporary revisions and alert service bulletins and issued Canadian airworthiness directive CF-2004-22, dated October 22, 2004, to ensure the continued airworthiness of these airplanes in Canada.

FAA's Determination and Requirements of This AD

These airplane models are manufactured in Canada and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. According to this bilateral airworthiness agreement, TCCA has kept us informed of the situation described above. We have examined the TCCA's findings, evaluated all pertinent information, and determined that we need to issue an AD for products of this type design that are certificated for operation in the United States.

Therefore, we are issuing this AD to require revising the airplane flight manual to provide the flightcrew with procedures and limitations for operating an airplane with out-of-tolerance AOA transducers. This AD also requires repetitive linearity tests of the AOA transducers, and corrective

action if necessary. This AD requires accomplishing the actions specified in the service information described previously, except as described in "Differences Between This AD and Referenced Alert Service Bulletins."

Difference Between Proposed AD and Referenced Alert Service Bulletins

Operators should note that, although the Accomplishment Instructions of the referenced alert service bulletins describe procedures for submitting service bulletin incorporation notices to the manufacturer, this AD does not require those actions.

Clarification of Terminology

In this AD, the linearity "checks" of the AOA transducers specified in the Canadian airworthiness directive and the Bombardier alert service bulletins are referred to as "tests."

Interim Action

This is considered to be interim action until final action is identified, at which time we may consider further rulemaking.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD; therefore, providing notice and opportunity for public comment before the AD is issued is impracticable, and good cause exists to make this AD effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2004-19862; Directorate Identifier 2004-NM-228-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of our docket Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You can review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you can visit <http://dms.dot.gov>.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications with you. You can get more information about plain language at <http://www.faa.gov/language> and <http://www.plainlanguage.gov>.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD. See the ADDRESSES section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-25-19 Bombardier, Inc., (Formerly Canadair): Amendment 39-13907. Docket No. FAA-2004-19862; Directorate Identifier 2004-NM-228-AD.

Effective Date

- (a) This AD becomes effective January 4, 2005.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to the Bombardier airplanes, certificated in any category, that are listed in Table 1 of this AD.

TABLE 1.—APPLICABILITY

Bombardier model	Having serial numbers	Which have an angle of attack transducer (AOA) with the following part number
CL-600-1A11 (CL-600) series airplanes	1004 through 1085 inclusive	600-59154-5
CL-600-2A12 (CL-601) series airplanes	3001 through 3066 inclusive	600-59154-5
CL-600-2B16 (CL-601-3A and CL-601-3R) series airplanes	5001 through 5194 inclusive	600-59154-5
CL-600-2B16 (CL-604) series airplanes	5301 and subsequent	600-59154-5

Unsafe Condition

- (d) This AD was prompted by a report of premature wear of the potentiometers in AOA transducers having a certain part number. The FAA is issuing this AD to prevent a delay in the stall computer commands for stall warning, stick shaker, and stick pusher operation, due to premature wear of the potentiometers of the AOA transducers, which may cause the airplane to enter a stall condition, and result in loss of control of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Airplane Flight Manual (AFM) Revisions

(f) Within 7 days after the effective date of this AD: Revise the Limitations, Performance, and Normal Procedures Sections of the applicable Canadair Challenger AFM by inserting the applicable Bombardier temporary revision (TR), as listed in Table 2 of this AD. Some TRs listed in Table 2 of this AD contain Product Support Publication (PSP) identifiers.

TABLE 2.— BOMBARDIER TEMPORARY REVISIONS

Model	Temporary revision	PSP	Dated
CL-600-1A11 (CL-600) series airplanes	600/20-2	600 (not stated in document)	October 15, 2004.
	600-1/15-2	600-1 (not stated in document)	October 15, 2004.
CL-600-2A12 (CL-601) series airplanes	601/12-2	601-1B-1	October 15, 2004.
	601/13-2	601-1A-1	October 15, 2004.
	601/17-2	601-1B	October 15, 2004.
	601/25-2	601-1A-18 (not stated in document).	October 15, 2004.
CL-600-2B16 (CL-601-3A and -3R) series airplanes.	601/22-2	601A-1-1	October 15, 2004.
	601/23-2	601A-1	October 15, 2004.
CL-600-2B16 (CL-604) series airplanes	604/9-6	604-1	October 15, 2004.

Repetitive Tests

(g) Prior to the accumulation of 100 total flight hours on any AOA transducer, part number (P/N) 600-59154-5, since new, or within 50 flight hours after the effective date of this AD, whichever is later: Perform a linearity test of each AOA transducer by accomplishing all of the applicable actions specified in the Accomplishment Instructions of the applicable Bombardier alert service bulletin listed in Table 3 of this AD. Repeat the linearity test of each AOA transducer thereafter at intervals not to exceed 100 flight hours. Although the alert service bulletins specify to submit certain information to the manufacturer, this AD does not include such a requirement.

TABLE 3.— BOMBARDIER ALERT SERVICE BULLETINS

For model—	Bombardier alert service bulletin	Dated	Excluding
CL-600-1A11 (CL-600) series airplanes	A600-0729	October 14, 2004	Appendix A
CL-600-2A12 (CL-601) series airplanes and CL-600-2B16 (CL-601-3A and -3R) series airplanes.	A601-0571	October 14, 2004	Appendix A
CL-600-2B16 (CL-604) series airplanes	A604-27-026	October 14, 2004	Appendix A

Corrective Action

(h) For any AOA transducer, P/N 600-59154-5, that does not pass any linearity test as required by paragraph (g) of this AD: Before further flight, replace the affected AOA transducer with a serviceable transducer by accomplishing the applicable actions specified in the Accomplishment Instructions of the applicable Bombardier alert service bulletin listed in Table 3 of this AD.

Alternative Methods of Compliance (AMOCs)

(i) The Manager, New York Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

Related Information

(j) Canadian airworthiness directive CF-2004-22, dated October 22, 2004, also addresses the subject of this AD.

Material Incorporated by Reference

(k) You must use the Bombardier alert service bulletins and temporary revisions to the applicable Canadair Challenger airplane flight manuals specified in Table 4 of this AD, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approves the incorporation by reference of those documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. For copies of the service information, contact Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada. You can review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL-401, Nassif Building, Washington, DC; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

TABLE 4.—MATERIAL INCORPORATED BY REFERENCE

Bombardier document	PSP	Document date
Alert Service Bulletin A600-0729, excluding Appendix A	None	October 14, 2004
Alert Service Bulletin A601-0571, excluding Appendix A	None	October 14, 2004
Alert Service Bulletin A604-27-026, excluding Appendix A	None	October 14, 2004
Temporary Revision 600/20-2	600 (not stated in document)	October 15, 2004
Temporary Revision 600-1/15-2	600-1 (not stated in document)	October 15, 2004
Temporary Revision 601/12-2	601-1B-1	October 15, 2004
Temporary Revision 601/13-2	601-1A-1	October 15, 2004
Temporary Revision 601/17-2	601-1B	October 15, 2004
Temporary Revision 601/22-2	601A-1-1	October 15, 2004
Temporary Revision 601/23-2	601A-1	October 15, 2004
Temporary Revision 601/25-2	601-1A-18 (not stated in document)	October 15, 2004
Temporary Revision 604/9-6	604-1	October 15, 2004

Issued in Renton, Washington, on December 6, 2004.
Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 04-27507 Filed 12-17-04; 8:45 am]
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